

PEOPLE

on the

MOVE

Human Resources reports the following personnel changes:

Key Management Assignments

Jeanie Carter was named chief information officer.

Additions to the Workforce

Jessica Lally joins the Projects Procurement Office, Office of Procurement, as a contract specialist.

Joey Broome joins the Advanced Mission Design Branch, Aeroscience and Flight Mechanics Division, Engineering Directorate, as a design engineer.

Edgar Medina joins the Guidance, Navigation, and Control Design and Analysis Branch, Aeroscience and Flight Mechanics Division, Engineering Directorate, as a design engineer.

Jason Dake joins the EVA and IVA Equipment Branch, Crew and Thermal Systems Division, Engineering Directorate, as a test engineer.

John Feighery joins the Life Support and Habitability Systems Branch, Crew and Thermal Systems Division, Engineering Directorate, as a test engineer.

Promotions

Lindy Fortenberry was selected as a management analyst in the International Space Station Business Management/Commercialization Office, Space Station Program Office.

Linda Crotts was selected as senior secretary in the Legal Office.

Mary O'Connell was selected as exchange operations special assistant in the Human Resources Office.

Reassignments Between Directorates

Camille Wilson moves from the International Space Station Program Office to the Public Affairs Office.

Larry Moon moves from the International Space Station Program Office to the Engineering Directorate.

Laversa Owens-Taylor moves from the Engineering Directorate to the Space Shuttle Program Office.

Trish Petete moves from the Engineering Directorate to the Space Shuttle Program Office.

Rick Schmidgall moves from the Mission Operations Directorate to the Space Shuttle Program Office.

Bill Jordan moves from the Space Shuttle Program Office to the International Space Station Program Office.

Reassignments Between Centers

Anna Henderson moves to NASA Headquarters.

Retirements

Jack Garman and John Arnold of the Office of the Chief Information Officer.

Gary Kane of the Systems Management Office.

Johnnie Kemp of the Legal Office.

Boyd Mounce and Pat Malpass of the Public Affairs Office.

James Bagwell, Lew Casey, Wally Tuthill, Charles Verostko, and William Wood of the Engineering Directorate.

Cathey Lamb of the Office of the Chief Financial Officer.

Robert Kain and Richard Sims of the Space Shuttle Program Office.

Dot Childress of the International Space Station Program Office.

Charles Bourland, Walter Hanby, James Lewis, Richard Sauer, and Laurie Webster of the Space and Life Sciences Directorate.

Resignations

Kellye Welch of the Office of Procurement.

Don McMonagle of the Space Shuttle Program Office.

Nelda Howell of the Safety, Reliability, and Quality Assurance Office.

Stephen Hunter of the International Space Station Program Office.

NASA BRIEFS

LONE BLACK HOLES DISCOVERED  
ADrift IN GALAXY

Two international teams of astronomers using NASA's Hubble Space Telescope and ground-based telescopes in Australia and Chile have discovered the first examples of isolated stellar-mass black holes adrift among the stars in our galaxy.

All previously known stellar black holes have been found in orbit around normal stars, with their presence determined by their effect on the companion star. The two isolated black holes were detected indirectly by the way their extreme gravity bends the light from a more distant star behind them.

"These results suggest that black holes are common, and that many massive but normal stars may end their lives as black holes instead of as neutron stars," said David Bennett of the University of Notre Dame, South Bend, IN. Bennett presented his team's results in Atlanta at the 195th meeting of the American Astronomical Society.

The findings also suggest that stellar mass black holes do not require some sort of interaction in a double star system to form, but may also be produced in the collapse of isolated massive stars, as has long been proposed by stellar theorists.

CHANDRA RESOLVES X-RAY GLOW  
INTO MILLIONS OF OBJECTS

While taking a giant leap toward solving one of the greatest mysteries of astronomy, NASA's Chandra X-ray Observatory also may have revealed the most distant objects ever seen in the universe and discovered two puzzling new types of cosmic objects.

Not bad for being on the job only five months.

Chandra has resolved most of the X-ray background, a pervasive glow of X-rays throughout the universe, which was first discovered in the early days of space exploration. Before now, scientists have not been able to discern the origin of the hard, or high-energy, X-ray background, because until Chandra no telescope has had the technology to resolve it.

"This is a major discovery," said Dr. Alan Bunner, director of NASA's Structure and Evolution of the Universe science theme. "Since it was first observed 37 years ago, understanding the source of the X-ray background has been a Holy Grail of X-ray astronomy. Now, it is within reach."

The Chandra team looked at a small section of the sky, a circle about one-fifth the size of a full moon, and resolved about 80 percent of the X-ray glow in this region into specific light sources. Stretched across the entire sky, this adds up to approximately 70 million sources, most of which are galaxies.

One-third of the sources are galaxies whose cores shine bright in X-rays, yet do not shine in visible light. There may be tens of millions of these "veiled galactic nuclei" in the universe. Each of these galaxies likely harbors a massive black hole at its core that produces X-rays as gas is pulled toward it at nearly the speed of light.

A second new class of objects, comprising approximately one-third of the sources, is assumed to be "ultra-faint galaxies." These sources may emit little or no optical light.

DATES

&

DATA

February 11

**Astronomers meet:** The JSC Astronomical Society will meet at 7:30 p.m. at the Center for Advanced Space Studies, 3600 Bay Area Blvd. For more information call Chuck Shaw at x35416.

February 13

**Westside NSS meets:** The "Westside" group of the Clear Lake area chapter of the National Space Society will meet at 2 p.m. at Silicon Graphics, 11490 Westheimer, Suite 100. For additional information call Murray Clark at (281) 367-2227.

February 15

**AIAA meets:** Johnny Conkin, Ph.D., will discuss "Protection Against Decompression Sickness on Mars" at AIAA's "Lunch & Learn" at 11:30 a.m. in Bldg. 37, Conference Room 2. For more information and reservations contact Karin Loftin at x41122.

February 16

**Astronomy seminar:** The JSC Astronomy Seminar Club will meet at noon February 16 and 23 and March 1 and 8 in Bldg. 31, Rm. 248A. For more information call Al Jackson at x35037.

**Spaceteam Toastmasters meet:** The Spaceteam Toastmasters will meet at 11:30 a.m. February 16 and 23 and March 1 and 8 at United Space Alliance, 600 Gemini. For more information, call Patricia Blackwell at (281) 280-6863.

**Scuba club meets:** The Lunarfans will meet at 7:30 p.m. For additional information call Mike Manering at x32618.

February 17

**Communicators meet:** The Clear Lake Communicators, a Toastmaster International club, will meet February 17 and 24 at 11:30 a.m. Please note the new meeting location at Wyle Laboratories, 1100 Hercules, Suite 305. For details contact Allen Prescott at (281) 282-3281 or Richard Lehman at (281) 280-6557.

**Directors meet:** The Space Family Education board of directors will meet at 11:30 a.m. in Bldg. 45, Rm. 712D. For more information contact Lynn Buquo at x34716.

February 24

**Radio Club meets:** The JSC Amateur Radio Club will meet at 6:30 p.m. at the Piccadilly, 2465 Bay Area Blvd. For additional information contact Larry Dietrich at x39198.

February 28

**Alzheimer's support group meets:** The Clear Lake Alzheimer's Caregiver Support Group will meet at 7:30 p.m. in the first floor conference room, St. John Hospital West building, Nassau Bay. For more information contact Nancy Malley at (281) 480-8917 or John Gouveia (281) 280-8517.

March 9

**SSQ meets:** The Society for Software Quality presents "Licensure as a Professional Engineer in Software Engineering" by Dr. Chuck Hoffman of Barrios Technology. The brown bag will be at noon at Barrios Technology conference room, 2525 Bay Area Blvd., Suite 300. R.S.V.P. by March 6 to Renne Peterson (281) 282-4392.